

### REMARKS

We have added claims 16 and 17.

#### 35 U.S.C. § 103 Rejections

##### *Independent Claim 1*

The Examiner rejected claims 1, 3, 5, and 7 as being unpatentable over Sinha (2003/0183410) in view of Morita (U.S. 6,344,956). The Examiner acknowledges that Sinha fails to disclose a power flow controller (see page 3, Office Action). However, the Examiner cites Morita as disclosing a power flow controller that selectively regulates power flowing through a superconductive line. The Examiner argues that it would have been obvious to one of ordinary skill in the art to add a reactor to Sinha's superconductor transmission line to regulate the power flow through the line and to react quickly to short-circuit accidents.

We submit however that neither Sinha nor Morita, separately or in any proper combination, describe or suggest a multi-line utility power transmission system comprising ... a power flow controller, coupled to the second power transmission line, for selectively regulating by a variable amount at least one of the magnitude and direction of the power flowing through the second power transmission line, as recited in amended claim 1.

Morita discloses a current-limiting device that "provide[s] a mechanism which promotes or generates quenching . . . to accomplish transition of the current-limiting element from a superconductive state to a normal conductive state . . . '[Q]uenching' refers to a sudden transition from superconduction to normal conduction" (col. 2, lines 54-55, 60, and 66-67). Even if the current-limiter of Morita is a power flow controller, which we do not concede, Morita does not teach that its current-limiter selectively regulates by a variable amount the power flow.

As stated in Applicants' specification, the power flow controller achieves variable power flow control over a superconductive line (see page 7, lines 13-22). Nowhere does Morita describe or suggest that his current-limiter can regulate by a variable amount the

power flow while the current-limiter transitions from a superconductive state to a normal conductive state (col. 2, lines 66-67). As discussed above, Morita's transition from superconductive power flow to normal conductive power flow is "sudden." Since power flow can be regulated as a function of resistive properties over the line, Morita's current-limiter ostensibly has two states of resistance, one resistance at which power flows through the current-limiter at superconductive levels, and one resistance at which power flows at normal conductive levels. Thus, the power flow through Morita's current-limiter cannot be regulated by a variable amount while the current-limiter is quenching.

Thus, even if a person of skill in the art would somehow be compelled to combine the teachings of Sinha with Morita, which we vehemently deny (see Reply to Office Action dated October 26, 2006). For this reason alone, we submit that the rejection of claim 1 should be withdrawn. We further submit that because claims 3, 5, and 7 depend from claim 1 these claims are patentable for at least the same reasons that claim 1 is patentable.

#### *Independent Claim 10*

The Examiner rejected claims 10, 11, and 13-14 as being unpatentable over Sinha, Morita and Hingorani. The Examiner acknowledges that Sinha fails to teach determining and regulating the level and amount of power flow through the second transmission line (see page 5, Office Action). The Examiner argues that Morita teaches this feature with its current-limiting device.

We submit that none of Sinha, Morita and Hingorani teach a method including "selectively regulating by a variable amount the power transferred through the second power transmission line" as recited in amended claim 10. As discussed above in conjunction with claim 1, we submit that Morita's fault current limiter changes the power flow by a fixed amount while the current-limiter transitions from a superconductive state to a normal conductive state.

For at least these reasons, we submit that claim 10 is patentable over Sinha, Morita and Hingorani, either alone or in any proper combination. We also submit that

because claims 11, 13 and 14 depend from claim 10, these dependent claims are patentable for at least the same reasons that independent claim 10 is patentable.

The Examiner rejected dependent claims 4, 6, 8-11, 13-15 as being unpatentable over Sinha and Morita and further in view of over one or more of Talisa (cited as teaching the use of high temperature superconductor made of Ti-Ba-Ca-Cu-O), Shimomura (cited as disclosing a cross-linked polyethylene power transmission line) and Hingorani (cited as teaching a bi-directional power flow controller). We submit however that none of these secondary and tertiary references disclose that which was missing from Sinha and Morita.

#### Conclusion

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

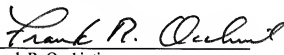
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The Petition for Extension of Time fee in the amount of \$120.00 is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 50-4189, referencing Attorney Docket No. 30020-189001.

Respectfully submitted,

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